

**INSTALLATION
INSTRUCTIONS**

JOHN DEERE SERIES 300 ENGINES

CAUTION



Do NOT plug in heater if heating element is not immersed in coolant. If not immersed, element sheath may burst and could result in personal injury.
DO NOT use heater in coolant system containing any form of stop-leak additive.
DO NOT use heater in coolant system containing anything other than the recommended mixture of ethylene glycol and water.

HEATER INSTALLATION PROCEDURE

1. Drain engine coolant. Clean cooling system when necessary.
2. Remove 3/4" pipe plug located at upper left rear face of the engine. This plug is located above the bell housing and is not accessible in all applications. In applications where a heater hose is connected to this plug, use a 3/4" pipe tee to install the heater.
3. Assemble heater as shown. Install O-ring over heating element bushing. Thread element retainer into adapter nut, but DO NOT tighten.
4. Coat 3/4" pipe threads with gasket cement or teflon.
5. Install heater so that heating element and electrical pins are in vertical position.



NOTE

The element has an offset which should be positioned to the outside of the block to clear the internal cylinder wall. Tighten 3/4" adapter nut securely to engine with wrench.

6. Casting boss inside engine cavity might contact heating element. If this happens, turn heating element to the right until you feel it touch inside the engine and then turn it to left. Position heating element approximately halfway between those 2 points. Tighten element retainer securely with wrench while holding 3/4" adapter nut with another wrench.
7. Insert power connector into socket, being careful to align pins with sockets of connector on cord. Press plug firmly into socket. Tighten strain relief nut securely by hand.
8. Allow slack for engine vibration and protect cord from excessive heat and also from possible chafing or mechanical damage.



CAUTION

Fill system with good grade permanent type 50/50 antifreeze mix.



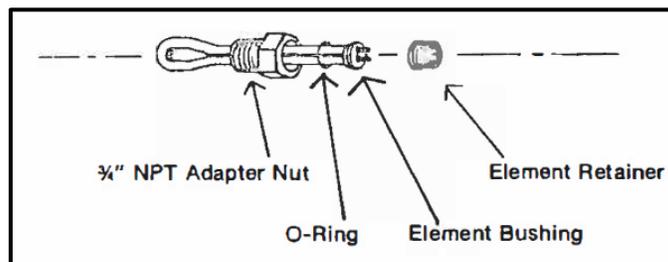
NOTE

Due to impurities found in most cooling systems, Phillips and Temro recommends the installation of an adequate water filtration system.



CAUTION

Do not start engine with heater plugged in. Turbulence and air bubbles can cause hot spots on heating element and can result in element failure.



WARRANTY

The Phillips & Temro Industries warranty statement is located on the website at phillipsandtemro.com/terms.